TECHNICAL CHANGE ORDER NO. T-3 FOR ORDER NO. 91-50 CITY OF SAN CLEMENTE WATER RECLAMATION PLANT RECLAMATION PROJECTS ORANGE COUNTY

IT IS HEREBY ORDERED THAT Monitoring and Reporting Program No. 91-50 is modified as follows:

Section D of Monitoring and Reporting Program No. 91-50 is replaced with the following:

D. BRINE INTERCEPTION AND DISPOSAL FACILITIES

The liquid depth and freeboard of the storage pond of the leachate collection system at the Pacific Golf Course shall be measured monthly and reported semiannually.

Ordered by

Executive Officer 21 October, 1993

TECHNICAL CHANGE ORDER NO. T-2
FOR
MONITORING AND REPORTING PROGRAM NO. 91-50
FOR THE
CITY OF SAN CLEMENTE
WATER RECLAMATION PLANT
RECLAMATION PROJECTS
ORANGE COUNTY

It is hereby ordered that Section G. GROUND WATERS of the Monitoring and Reporting Program 91-50 be amended as follows:

Wells identified as City of San Clemente Well Nos. 3 and 4 are deleted from the groundwater monitoring program. Groundwater monitoring shall continue at the City of San Clemente Well No. 6 (State Well No. 09S/07W-10H01) and at the City of San Clemente Well No.7 (State Well No. 09S/07W-11H01) in accordance with Section G. "GROUND WATERS" of the Monitoring and Reporting Program 91-50.

Ordered by

Arthur L. Coe Executive Officer 15 July 1993

TECHNICAL CHANGE ORDER NO. T-1
FOR
MONITORING AND REPORTING PROGRAM NO. 91-50
FOR THE
CITY OF SAN CLEMENTE
WATER RECLAMATION PLANT
RECLAMATION PROJECTS
ORANGE COUNTY

It is hereby ordered that Section I. POTABLE SUPPLY WATER be added to Monitoring and Reporting Program No. 91-50 as follows:

I. POTABLE SUPPLY WATER

Analysis of the potable water supplied to the service area of the City of San Clemente Water Reclamation Plant shall be conducted for the following constituents at least semiannually with the results of the latest analysis reported monthly:

Constituent	Unit
Total dissolved solids	mg/l
Chloride	mg/l
Sulfate	mg/l

Ordered	by:	
	•	ARTHUR L. COE
		Executive Officer

Date: 21 June 1993

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ORDER NO. 91-50

WASTE DISCHARGE REQUIREMENTS
FOR THE
CITY OF SAN CLEMENTE
WATER RECLAMATION PLANT
RECLAMATION PROJECTS
ORANGE COUNTY

The California Regional Water Quality Control Board, San Diego Region, (hereinafter Regional Board) finds that:

- 1. On May 4, 1987, the Regional Board adopted Order No. 87-40, Waste Discharge Requirements for Land Disposal of Wastewater by the City of San Clemente, Orange County. Order No. 87-40 updated requirements for the disposal of up to 1.0 million gallons per day (MGD) of secondarily treated domestic wastewater at the Municipal Golf Course for irrigation purposes. This Order also authorized the discharge of up to 0.05 MGD of domestic water filter backwash wastewater from Domestic Well No. 3, 4, 5 and 6 to the Bahia pond, located at the Municipal Golf Course. Domestic Well No. 3, 4, 5 and 6 are equipped with filters which extract iron and manganese.
- 2. On December 15, 1989, the City of San Clemente submitted an incomplete Report of Waste Discharge (RWD) for the disposal of up to 750,000 gallons per day (gpd) of reclaimed water at Pacific Golf Club. After submission of additional information on April 2 and November 16, 1990 the RWD was considered complete. Subsequently, the City amended their RWD on April 12, 1991 to include additional potential reclaimed water users.
 - 3. By letter dated January 15, 1991, the Executive Officer granted a temporary waiver of Waste Discharge Requirements for the use of reclaimed water at Pacific Golf Club underconditions contained in Resolution No. 88-91, Conditional Waivers of Waste Discharge Requirements and Water Reclamation Requirements for Selected Water Reclamation Projects During Drought Conditions. The City (hereinafter discharger) reports that it initiated reclaimed water use at the Pacific Golf Club on February 15, 1991.
- 4. The discharger identified several potential reclaimed water use areas as follows:

Exist	ing Use Areas	Acreage	Average Demand, MGD
1.	Municipal Golf Course Pacific Golf Club	125 130	0.35 0.35
Tempo	orary Use Areas		
3.	Talega Valley grading	700	0.34
4.	South County Water Pipe line construction	- -	0.05
Pote	ntial Use Areas		
5.	Avenida Pico:	100	0.3
	Slopes/open space/ medians San Clemente High School	65 . ol 35	
6.	Caltrans freeway	40	0.1
7.	Avenida La Pata Slopes/open space	24	0.05
8.	Slopes/open space: Calle Del Cerro Calle Pastadero Calle Aguila Vista Montana	125	0.35
9.	Slopes: Calle Frontera/ Laurel	5	0.03
10.	City of San Clemente Water Reclamation Plant Irrigation	6.6	0.02
11.	State Park Total	10	0.02 1.96

The location of the above reclaimed water use areas are shown on Attachment No. 1 to this Order.

5. The City of San Clemente Water Reclamation Plant facilities consist of: preliminary treatment, primary treatment, and activated sludge secondary treatment. Existing treatment capacity is 4.9 MGD. The discharger is currently expanding the capacity of the secondary treatment facilities to 7.0

MGD. The discharger reports that grit and screenings are disposed of at the BKK landfill. Anaerobically digested, dewatered sludge is disposed at the Prima Deshecha landfill. The City has terminated its incineration of sewage sludge. After July 1991, construction for the expansion of the secondary treatment facilities and the Title 22 facilities should be complete. The Title 22 facilities will have a treatment capacity of 2.2 MGD and will include a reclamation forebay, two rapid mix alum mix tanks, coagulation, four dual media filters, chlorine contact basin and a reclamation storage bay. Backwash from the filters will be discharged back to the primary clarifiers. The discharger is planning to expand the capacity of the Title 22 facilities from 2.2 to 4.4 MGD in the future.

- The discharger reports that the Pacific Golf Course overlies the Segunda Deshecha Canada drainage area of the San Clemente Hydrologic Area (HA) and the San Mateo HA. The discharger reports that the total irrigated acreage of the Pacific Golf Club is 130 acres. Eighty-eight acres of the golf course overlies the San Mateo HA.
- The US Marine Corps Base, Camp Pendleton has expressed 7. concern that percolated reclaimed water containing an elevated total dissolved solids concentration may drain toward the San Mateo basin. As a mitigation measure, the discharger has proposed a brine interception and disposal system which would be placed along the border of the San This system would consist of a subsurface Mateo basin. drain. Percolated reclaimed water would be captured in this system and temporarily pumped to an existing, lined decorative lake, located in the Segunda Deshecha Canada drainage area, at the Pacific Golf Club. The discharger reports that the brine interception and disposal system is connected to the sewer pump station which is connected to the Water Reclamation Plant and could divert captured water to the Water Reclamation Plant. The discharger is currently exploring a permanent disposal method for the brine. addition, the discharger will install a low flow detention system near the brine interception system which will contain any potential surface runoff of reclaimed water into the San Mateo basin. A detailed monitoring program for this system is contained in Monitoring and Reporting Program No. 91-50.
- 8. The discharger will continue to discharge domestic water filter backwash to the Bahia pond located at the Municipal Golf Course. The Bahia pond has a storage capacity of approximately 3.0 MGD.

- 9. In addition, on September 28, 1990, the City of San Clemente submitted a complete RWD for an average daily flowrate of 711,000 gpd of reclaimed water for dust control, soil compaction and construction purposes at the Talega development. The discharger stated that on occasion this flowrate may increase to 1.0 MGD when the City fills the storage pond at the Talega development.
- 10. The reclaimed water use area for the grading operation will cover approximately 700 acres of the Talega Development. Five hundred acres of this development is tributary to the Segunda Deshecha Canada drainage area of the San Clemente HA and 150 acres are tributary to the San Mateo HA. operation and management of the construction and grading operations will be performed by the Arvida Company. The Arvida Company has a contract with the City of San Clemente until approximately July 1993 which states that the City will supply reclaimed water for construction purposes. RWD states that after construction of the South County Pipeline, potable water will replace the use of reclaimed water for construction purposes. The City of San Clemente will also provide chlorinated secondary effluent for sand slurry pipe bedding, trench backfill and dust control for the South County Pipeline. It is estimated that construction of the South County Pipeline will be completed by January 1992.
- 11. The Talega Development has a 3.2 million gallon pond for the purpose of construction and grading operations. The pond is lined with PVC overlying a two foot clay layer. In addition, there are approximately fifteen elevated steel tanks located onsite which will provide an additional 0.25 million gallon holding capacity. During periods of wet weather or no demand for reclaimed water use, City effluent will be disposed via the SERRA ocean outfall. The SERRA ocean outfall is regulated by this Regional Board under Order No. 87-71.
- 12. By letter dated August 1, 1991, the Executive Officer conditionally waived the use of reclaimed water for grading purposes at the Talega project, under Resolution 83-21, A Resolution Conditionally Waiving Adoption of Waste Discharge Requirements for Certain Specific Types of Discharges. This conditional waiver was issued provided: 1) the City of San Clemente submit a complete Report of Waste Discharge prior to October 1, 1990; 2) Arvida conduct a field test verifying the permeability of the pond is less than or equal to 1 x 10⁻⁶ cm/s; and 3) the City comply with conditions contained in Resolution No. 83-21 and applicable of State Department of Health Services quidelines. Arvida has conducted a field

permeability test which indicates that the pond permeability is less than 1 x 10^{-6} cm/s.

- 13. On September 30, 1986, the City of San Clemente adopted a Negative Declaration for the use of reclaimed water at the Pacific Golf Club in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seg.). The project as approved by the City of San Clemente contained the following mitigation measures for any potential water quality impacts as the result of use of reclaimed water at the Pacific Golf Club:
 - Surface runoff from the site will be sampled on a regular basis during the rainy season (October March) in drainage channels exiting the site at the eastern boundary. This mitigation measure is contained in the Monitoring and Reporting Program for this Order.
 - A subdrain system beneath irrigated areas of the golf course designed to collect leachate water flushed through the system on a periodic basis. The subdrain shall direct leachate water toward evaporating ponds. The City has incorporated a subsurface drain as a mitigation measure to collect percolated reclaimed water and will temporatily pump it to a pond located on the golf course. Permanent measures of disposal of this percolate are currently being investigated by the City of San Clemente.
- 14. On January 31, 1990, the City of San Clemente adopted a Negative Declaration for the use of nondomestic water for grading purposes at the Talega Development in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.). The project as approved by the City of San Clemente will not have any significant impacts on water quality.
- Golf Course since 1957. The discharger submitted a report entitled, Evaluation of Use of Reclaimed Water for the Municipal Golf Course Irrigation, City of San Clemente, April 1980, to the Regional Board. Information in the report indicated that the long history of irrigation of the Municipal Golf Course has not significantly impacted beneficially used ground waters of the San Clemente HA. The report concluded that recharge of beneficially used ground waters of the San Clemente HA is from the adjoining San Mateo HA. The report also concluded that percolating golf course irrigation waters move southwesterly under Interstate 5 to a portion of the San Clemente HA where the water

quality objectives do not apply. Based on this information, irrigation of the Municipal Golf Course with secondary effluent has not been and will not be in conflict with the Basin Plan.

- 16. The Comprehensive Water Quality Control Plan Report, San Diego Basin (9) (Basin Plan), was adopted by this Regional Board on March 17, 1975 and subsequently approved by the State Water Resources Control Board (State Board). Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the State Board.
- 17. The Basin Plan established the following beneficial uses of the surface waters in the San Clemente Hydrologic Area (1.30):
 - a. Agricultural supply
 - b. Non-contact Water recreation
 - c. Wildlife habitat
 - d. Preservation of rare and endangered species
- 18. The Basin Plan established the following beneficial uses of the ground waters in the San Clemente Hydrologic Area (1.30):
 - a. Municipal and domestic supply
 - b. Agricultural supply

All beneficial uses for the Segunda Deshecha Canada drainage area of the San Clemente Hydrologic Area (1.30) have been deleted.

19. The Basin Plan established the following objectives for surface and ground waters in the San Clemente Hydrologic Area (1.30):

Constituent	Concent more th Surface	an 10 perce	to be exceeded nt of the time Ground Water
Total dissolved solids	500	mg/L	500 mg/L
Chloride	250	mg/L	250 mg/L
Percent sodium	60	*	60 %
Sulfate	250	mg/L	250 mg/L
Nitrate (as NO ₃)	~~~	2,	10 mg/L
Nitrogen and phosphorus	***		mg/ b
Iron	0.3	mg/L	0.3 mg/L
Manganese	0.05	- -	0.05 mg/L
Methylene blue active Substances	0.5	mg/L	0.5 mg/L
Boron Odor	0.5 None	mg/L	0.5 mg/L None
Turbidity	20	NTU	ס אדע
Color	20	Units	15 Units
Fluoride	1.0	mg/L	1.0 mg/L

The water quality objectives do not apply westerly of the easterly boundary of Interstate Highway 5. The objectives for the remainder of the hydrologic area are as shown.

**The ground water quality objectives for the Segunda Deshecha Canada drainage area have been deleted.

***Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth. Threshold total phosphorus (P) concentrations shall not exceed 0.05 mg/L in any stream at the point where it enters any standing body of water. A desired goal in order to prevent plant nuisances in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10 percent of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1 shall be used.

Note: mg/L = milligrams per liter
NTU = Nephelometric Turbidity Units

- 20. The Basin Plan also contains the following prohibitions applicable to the land disposal of wastewater:
 - "Discharge of treated or untreated sewage or industrial wastes to a natural watercourse upstream of surface storage or diversion facilities used for municipal supply is prohibited."
 - "Discharge of treated or untreated sewage or industrial wastewater, exclusive of cooling water or other waters which are chemically unchanged, to a watercourse, is prohibited except in cases where the quality of said discharge complies with the receiving body's water quality objectives."
 - "Discharge of treated or untreated sewage or industrial wastes in such manner or volume as to cause sustained surface flow or ponding on lands not owned or under the control of the discharger is prohibited except in cases defined in the previous paragraph and in cases in which the responsibility for all downstream adverse effects is accepted by the discharger."
- 21. 'This Order authorizes the use of reclaimed water in the following portions of the San Clemente HA:
 - Lands within the Segunda Deshecha Canada drainage area.
 - b. Lands westerly of the easterly of Interstate 5.
 - c. The Municipal golf course as described in Finding No. 4.
 - d. The Pacific Golf Club as described in Finding No. 6.
 - e. The Talega Development as described in Finding No. 10.

The boundaries of these authorized reclaimed water use areas are shown on Attachment No. 2 to this Order.

22. The Basin Plan does not establish ground water quality objectives for lands within the Segunda Deshecha Canada drainage area or lands westerly of the easterly boundary of Interstate 5. Ground water quality objectives for these areas were deleted from the Basin Plan by the Regional Board in accord with the requirements of Resolution No. 68-16 and other requirements of the California Water Code, in order to encourage the use of reclaimed water in these areas.

Secondary effluent has been used for irrigation of the municipal golf course since 1957 as described in Finding No. 15 of this Order. Based on the foregoing information, the

discharge of reclaimed water to the areas authorized under this Order will be in conformance with San Clemente HA ground water quality objectives contained in the Basin Plan.

- 23. The discharge of reclaimed water to the areas authorized under this Order is in conformance with Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California. The wastewater reclamation and reuse projects that will occur in the areas of the San Clemente HA under the terms and conditions of this Order will:
 - a) Have maximum benefit to the people of the State, because in the absence of reclaimed wastewater, imported potable water would be used for irrigation of the reclaimed water use areas described in this Order;
 - b) Not unreasonably affect the beneficial uses of ground water in the San Clemente HA; and
 - C) Not cause the ground water quality objectives of the San Clemente HA to be exceeded.
- This Order prescribes waste discharge requirements and reclamation requirements governing the production and use of reclaimed water, which the Regional Board has determined are necessary to protect the public health, safety and welfare pursuant to California Water Code, Division 7, Chapter 7, Sections 13500-13550 ("Water Reclamation Law"). This Order, which applies to the producer of reclaimed water, requires that the producer of the reclaimed water establish and enforce rules and regulations which apply to users, including purveyors, of the reclaimed water.
- 25. The Regional Board considered all environmental factors associated with the discharge of waste.
- 26. The Regional Board has notified the discharger and all known interested parties of its intent to adopt waste discharge requirements for use of reclaimed water by the City of San Clemente.
- 27. The Regional Board in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, That the City of San Clemente (hereinafter discharger), in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. PROHIBITIONS

- Discharges of wastes, including windblown spray and runoff of effluent applied for irrigation, to lands which have not been specifically described in the report of waste discharge and for which valid waste discharge requirements are not in force are prohibited.
- The discharge of any radiological, chemical or biological warfare agent, or high-level radiological waste is prohibited.
- 3. Storage, use and/or disposal of wastes in a manner that would result in ponding or surfacing of wastes on lands beyond the disposal area, as described in the findings of this Order, is prohibited.
- 4. The discharge of wastewater shall not:
 - (a) Cause the occurrence of coliform or pathogenic organisms in waters pumped from the basin;
 - (b) Cause the occurrence of objectionable tastes and odors in water pumped from the basin;
 - (c) Cause waters pumped from the basin to foam;
 - (d) Cause the presence of toxic materials in waters pumped from the basin;
 - (e) Cause the pH of waters pumped from the basin to fall below 6.0 or rise above 9.0;
 - (f) Cause this Regional Board's objectives for the ground or surface waters of the San Clemente Hydrologic Area as established in the Basin Plan, to be exceeded;
 - (g) Cause odors, septicity, mosquitos or other vectors, weed growth or other nuisance conditions in any inland watercourse;
 - (h) Cause a surface flow recognizable as sewage any inland watercourse; or
 - (i) Cause a pollution, contamination or nuisance or adversely affect beneficial uses of the ground or surface waters of the San Clemente Hydrologic Area as established in the Basin Plan.

- 5. The discharge of a 30-day average waste flow volume for irrigation in excess of 2.2 MGD is prohibited unless the discharger obtains revised waste discharge requirements for the proposed increased flow.
- 6. Odors, vectors, and other nuisances of sewage or sewage sludge origin beyond the limits of the treatment plant site or disposal area are prohibited.
- 7. The bypassing of wastewater from the City of San Clemente Water Reclamation Plant which does not meet the effluent limitations established in Discharge Specification B.1 of this order is prohibited.
- 8. The discharge of waste in a manner other than as described in the findings of this Order is prohibited unless the discharger obtains revised waste discharge requirements that provide for the proposed change.
- The discharge of treated or untreated wastewater to any inland watercourse is prohibited.

B. DISCHARGE SPECIFICATIONS

1. The discharge of an effluent containing pollutants in excess of the following effluent limitations is prohibited:

Constituent	30-day ¹ Average		Daily ² Maximum	
Biochemical Oxygen Demand (BOD ₅ @ 20°C) Total Suspended Solids pH	30 30	mg/l	4.5 4.5	mg/l mg/l
Total dissolved solids Chloride Percent sodium Sulfate Iron Manganese Methylene blue active Substances Boron Odor Turbidity Color	400 ³ 200 ⁴ 60 ⁵ 0.3 0.05	all tirmg/lmg/l% mg/l% mg/lmg/lmg/l	450 ³ 250 ⁴ 60 10 ⁶⁵ 0.4 0.06 0.6 None	<pre>mg/l mg/l % mg/l mg/l mg/l mg/l mg/l mg/l mg/l</pre>
Fluoride Coliform		Units mg/l	* . 15 1.2 **	Units mg/l

- The 30-day average effluent limitation shall apply to the arithmetic mean of the results of all samples collected during any 30 consecutive calendar day period.
- The daily maximum effluent limitation shall apply to the results of a single composite or grab sample
- These are the increments of TDS in effluent over supply water. However, the daily maximum concentration of TDS in effluent shall not exceed 1500 mg/l under any circumstances.
- These are the increments of chloride in effluent over supply water. However, the daily maximum concentration of chloride in effluent shall not exceed 500 mg/l under any circumstances.
- These are the increments of sulfate in effluent over supply water. However, the daily maximum concentration of sulfate in effluent shall not exceed 500 mg/l under any circumstances.
 - Not to exceed an average operating turbidity of 2 turbidity units. Not to exceed 5 turbidity units more than 5 percent of the time during any 24-hour period. Compliance with the discharge specifications for turbidity and coliform are not required until July 1991 (after construction of Title 22 facilities are complete).
 - ** The median number of coliform organisms shall not exceed 2.2 per 100 milliliters as determined from the bacteriological results of the last 7 days for which analysis have been completed, and the number of coliform organisms shall not exceed 23 per 100 milliliters in any sample.
 - All waste treatment, containment and disposal facilities shall be protected against 100-year peak stream flows as defined by the Orange County flood control agency.
 - 3. All waste treatment, containment and disposal facilities shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year frequency 24-hour storm.
 - 4. Collected screenings, sludges, other solids removed from liquid wastes, and filter backwash shall be disposed in a manner approved by the Executive Officer. Before sludge is disposed of by means other than discharge to a landfill regulated under waste discharge requirements, used or supplied for use by others, the discharger shall submit

written notification to the Executive Officer of the proposed disposal method or use. Such disposal, use or supply for use by others shall not be initiated until approved by the Executive Officer.

- 5. Effluent used for irrigation shall conform with all applicable provisions of California Code of Regulations, Title 22, Division 4, Chapter 3 (Reclamation Criteria) for irrigation of parks, playgrounds, schoolyards, and other areas where the public has similar access or exposure (currently Sections 60313. (b) and 60320.5).
- 6. The City of San Clemente shall meet the design, operational, and reliability requirements of Articles 7, 8, 9 and 10 of the California Code of Regulations, Title 22, Division 4, Chapter 3. The City of San Clemente shall develop an engineering report conforming to Section 60323, Article 7 of the California Code of Regulations, Title 22, Division 4, Chapter 3. The engineering report shall be submitted to the State Department of Health Services, County Department of Health Services, and the Regional Board Executive Officer. Reclaimed water from the City of San Clemente Water Reclamation Plant shall not be used for irrigation until the engineering report is approved by the Executive Officer.
- 7. Effluent storage ponds shall be designed, constructed, operated, and maintained so as to prevent surfacing of wastes on property not owned or controlled by the discharger. Surface runoff of any wastes which surface on property owned or controlled by the discharger onto property not owned or controlled by the discharger shall be prevented.

C. PROVISIONS

- Neither the treatment nor the discharge of waste shall create a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code.
- 2. The discharger must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for (a) enforcement action; (b) termination, revocation and reissuance, or modification of this Order; or (c) denial of a report of waste discharge in application for new or revised waste discharge requirements.
- 3. In an enforcement action, it shall not be a defense for the discharger that it would have been necessary to

halt or reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure of the treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies for example, when the primary source of power of the treatment facility fails, is reduced, or is lost.

- 4. The discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
- The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order.
- 6. This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
 - (a) Violation of any terms or conditions of this Order;
 - (b) Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts; or
 - (c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the discharger for the modification, revocation and reissuance, or termination of this Order, or notification of planned changes or anticipated noncompliance does not stay any condition

of this Order.

- 7. This Order is not transferrable to any person except after notice to the Executive Officer. The Regional Board may require modification or revocation and reissuance of this Order to change the name of the discharger and incorporate such other requirements as may be necessary under the California Water Code. The discharger shall submit notice of any proposed transfer of this Order's responsibility and coverage to a new discharger as described under Reporting Requirement E.3.
- 8. This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from liability under federal, state or local laws, nor create a vested right for the discharger to continue the waste discharge.
- 9. The discharger shall allow the Regional Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:
 - (a) Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
 - (d) Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.
- 10. The discharger's wastewater treatment facilities shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Chapter 3, Subchapter 14, Title 23 of the California Code of

Regulations.

- 11. A copy of this Order shall be maintained at the City of San Clemente Water Reclamation Plant and shall be available to operating personnel at all times.
- 12. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
- 14. The potable water supply shall not be used to supplement the reclaimed water supply except through an approved air gap. In other areas where the potable water supply is piped to premises where sewage is pumped, treated or reclaimed (i.e., sewage treatment plants or pumping stations, golf course, etc.) the potable water supply shall be protected at the property line in accordance with the State Department of Health Services' Regulations Relating to Cross-Connections.
- 15. The requirements of this Order are applicable to any grading, compaction, or dust control operations within the area identified in Findings Nos. 10 and 11 and specifically approved by the Executive Officer.
- All waste water treatment and disposal facilities shall be completely constructed and operable prior to the initiation of any landscape irrigation, and the complete facilities shall have adequate capacity for the full design flow of 2.2 MGD. A report from design engineer certifying the adequacy of each component of the treatment and disposal facilities shall be submitted by the discharger prior to commencement of the irrigation. The certification report shall contain a requirement-by-requirement analysis based on acceptable engineering practices, of how the process and physical designs of the facilities will ensure compliance with the waste discharge requirements. design engineer shall affix his signature and engineering license number to the certification report and should submit it prior to construction of the facilities. The irrigation shall not be initiated until:
 - a. The certification report is received by the Regional Board;
 - b. The Regional Board has been notified of the

completion of facilities by the discharger;

c. An inspection of the facilities has been made by staff of the Regional Board; and

d. Staff has notified the discharger by letter that the irrigation can be initiated.

D. RECLAIMED WATER USE PROVISIONS

- 1. If the City of San Clemente (discharger/producer) is supplying reclaimed water for use by other parties, the discharger/producer shall establish Rules and Regulations for Reclaimed Water Users governing the design and construction of reclaimed water use facilities and the use of reclaimed water. The rules and regulations shall, at a minimum, contain the following provisions:
 - a. Provisions implementing Title 22, Division 4, Chapter 3, Wastewater Reclamation Criteria, of the California Code of Regulations;
 - b. Provisions implementing the State Department of Health Services (DOHS) Guidelines For Use of Reclaimed Water and Guidelines for Use of Reclaimed Water for Construction Purposes or measures, acceptable to DOHS, providing equivalent protection of public health;
 - c. Provisions authorizing the Regional Board, the discharger/producer, or an authorized representative of these parties, upon presentation of proper credentials, to inspect the facilities of any reclaimed water user to ascertain whether the user is complying with the discharger/producer's rules and regulations;
 - d. Provision for written notification, in a timely manner, to the discharger/producer by the reclaimed water user of any material change or proposed change in the character of the use of reclaimed water;
 - Provision for submission of a preconstruction report to the discharger/producer by the reclaimed water user in order to enable the discharger/producer to determine whether the user will be in compliance with the discharger/producer's rules and regulations;

- f. Provision requiring reclaimed water users to designate a reclaimed water supervisor responsible for the reclaimed water system at each use area under the user's control. Reclaimed water supervisors should be responsible for the installation, operation, and maintenance of the irrigation system, enforcement of the discharger/producer's reclaimed water user rules and regulations, prevention of potential hazards, and maintenance of the reclaimed water distribution system plans in "as built" form.
- g. Provision authorizing the discharger/producer to cease supplying reclaimed water to any person who uses, transports, or stores such water in violation of the discharger/producer's rules and regulations;
- h. Provision requiring that, except as authorized by the Regional Board Executive Officer, all reclaimed water storage facilities owned and/or operated by reclaimed water users shall be protected against 100-year peak stream flows as defined by the Orange County flood control agency.
- i. Provision requiring that, except as authorized by the Regional Board Executive Officer, all reclaimed water storage facilities owned and/or operated by reclaimed water users shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year frequency, 24-hour storm.
- j. Provision requiring notification and concurrence of the State Department of Health Services and the County of Orange, Health Care Agency, Environmental Health, Water Quality Section, for new reclaimed water users."
- k. Provision for notification to reclaimed water users that the Regional Board may initiate enforcement action against any reclaimed water user who discharges reclaimed water in violation of any applicable discharge prohibitions prescribed by the Regional Board or in a manner which creates, or threatens to create conditions of pollution, contamination, or nuisance, as defined in Water Code Section 13050; and

1. Provision for notification to reclaimed water users that the Regional Board may initiate enforcement action against the discharger/producer, which may result in the termination of the reclaimed water supply, if any person uses, transports, or stores such water in violation of the discharger/producer's rules and regulations or in a manner which creates, or threatens to create conditions of pollution, contamination, or nuisance, as defined in Water Code Section 13050.

The rules and regulations shall be subject to the approval of the Regional Board Executive Officer, the State Department of Health Services and the County of Orange Department of Health Services. The rules and regulations shall be submitted to the Regional Board within 90 days of adoption of this Order by the Regional Board.

- 2. The discharger/producer shall implement and enforce the approved rules and regulations for reclaimed water users. Use of reclaimed water by the discharger/producer shall be consistent with provisions a. through 1. in item 1 above.
- 3. The discharger/producer shall, within 90 days of the adoption of this Order, develop and submit to the Regional Board a program to conduct compliance inspections of reclaimed water reuse sites to determine the status of compliance with the approved rules and regulations for reclaimed water users. The discharger/producer shall implement the inspection program upon its approval by the Regional Board Executive Officer.
- 4. Reclaimed water shall not be supplied to parties who use, transport, or store such water in a manner which causes a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code.
- 5. The requirements of this Order are applicable to any use of reclaimed water within the Segunda Deshecha Canada drainage area of the San Clemente HA and areas westerly of the easterly boundary of Interstate 5 as shown on Attachment No. 2 to this Order as well as the Municipal Golf Course. Prior to using reclaimed water or supplying reclaimed water for use by other parties in any manner or in any area other than as described in the findings of this Order, the discharger shall obtain

proper authorization from this Regional Board.

E. REPORTING REQUIREMENTS

- 1. The discharger shall file a new Report of Waste Discharge at least 120 days prior to the following:
 - (a) Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the wastes.
 - (b) Significant change in the treatment or disposal method (e.g., change in the method of treatment which would significantly alter the nature of the waste.)
 - (c) Change in the disposal area from that described in the findings of this Order.
 - (d) Increase in flow beyond that specified in this Order.
 - (e) Other circumstances which result in a material change in character, amount, or location of the waste discharge.
 - (f) Any planned change in the regulated facility or activity which may result in noncompliance with this Order.
- 2. The discharger shall furnish to the Executive Officer of this Regional Board, within a reasonable time, any information which the Executive Officer may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The discharger shall also furnish to the Executive Officer, upon request, copies of records required to be kept by this Order.
- 3. The discharger must notify the Executive Officer, in writing at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new discharger. The notice must include a written agreement between the existing and new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current discharger and the new discharger. This agreement shall include an acknowledgement that the existing

discharger is liable for violations up to the transfer date and that the new discharger is liable from the transfer date on.

- 4. The discharger shall comply with the attached Monitoring and Reporting Program No. 91-50, and future revisions thereto as specified by the Executive Officer. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 91-50.
- 5. If a need for a discharge bypass is known in advance, the discharger shall submit prior notice and, if at all possible, such notice shall be submitted at least 10 days prior to the date of the bypass.
- 6. Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information.
- The discharger shall report any noncompliance which may 7. endanger health or the environment. Any such information shall be provided orally to the Executive Officer within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The following occurrence(s) must be reported to the Executive Officer within 24 hours:
 - (a) Any bypass from any portion of the treatment facility.
 - (b) Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge or any other circumstances.

- (c) Any treatment plant upset which causes the effluent limitations of this Order to be exceeded.
- 8. All applications, reports, or information submitted to the Executive Officer shall be signed and certified as follows:
 - (a) The Report of Waste Discharge shall be signed as follows:
 - (1) For a corporation by a principal executive officer of at least the level of vice-president.
 - (2) For a partnership or sole proprietorship by a general partner or the proprietor, respectively.
 - (3) For a municipality, state, federal or other public agency - by either a principal executive officer or ranking elected official.
 - (b) All other reports required by this Order and other information required by the Executive officer shall be signed by a person designated in paragraph (a) of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:
 - (1) The authorization is made in writing by a person described in paragraph (a) of this provision;
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and
 - (3) The written authorization is submitted to the Executive Officer.
 - (c) Any person signing a document under this Section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all

attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

9. The discharger shall submit reports required under this Order, or other information required by the Executive Officer, to:

Executive Officer
California Regional Water Quality Control Board
San Diego Region
9771 Clairemont Mesa Blvd, Suite B
San Diego, California 92124- 1331

F. NOTIFICATIONS

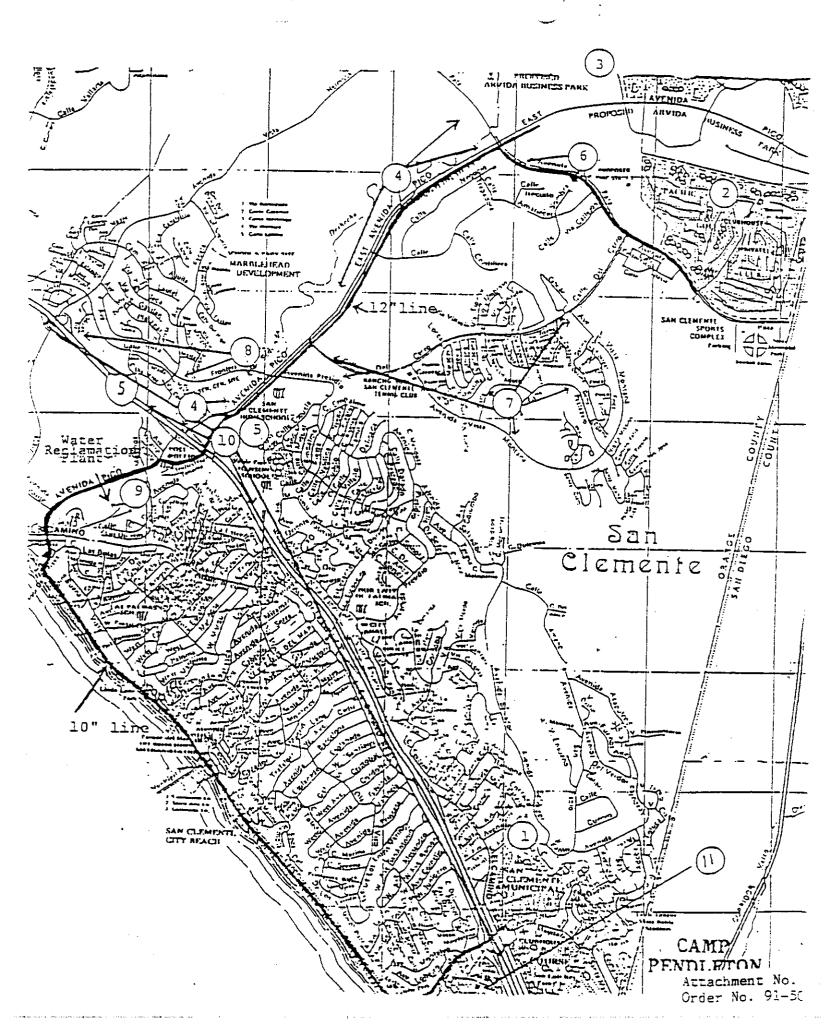
- California Water Code Section 13263(g) states:
 - "No discharge of waste into waters of the state, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. All discharges of waste into waters of the state are privileges, not rights"
- 2. These requirements have not been officially reviewed by the United States Environmental Protection Agency and are not issued pursuant to Section 402 of the Clean Water Act.
- 3. The California Water Code provides that any person who intentionally or negligently violates any waste discharge requirements issued, reissued, or amended by this Regional Board is subject to a civil monetary remedy of up to 20 dollars per gallon of waste discharged or, if a cleanup and abatement order is issued, up to 15,000 dollars per day of violation or some combination thereof.
- 4. The California Water Code provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or falsifying any information provided in the monitoring reports is guilty of a misdemeanor.

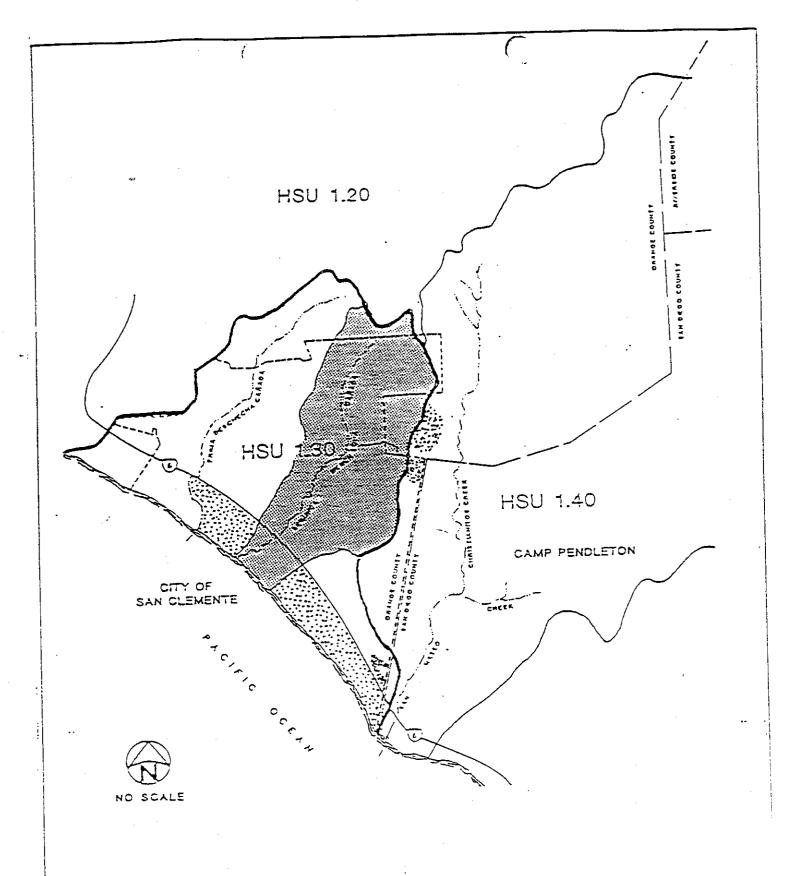
- 5. This Order becomes effective on the date of adoption by the Regional Board.
- 6. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 87-40. Order No. 87-40 is hereby rescinded when this Order becomes effective.

I, Arthur L. Coe, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on May 20, 1991.

Arthur L. Coe

Executive Officer





RECLAIMED WATER USE AREA

MONITORING AND REPORTING PROGRAM NO. 91-50
FOR THE
CITY OF SAN CLEMENTE
WATER RECLAMATION PLANT
RECLAMATION PROJECTS
ORANGE COUNTY

A. MONITORING PROVISIONS

- Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this Order and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Executive Officer.
- 2. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ±5 percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:
 - (a) "A Guide to Methods and Standards for the Measurement of Water Flow," U. S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 97 pp. (Available from the U. S. Government Printing Office, Washington, D. C. 20402. Order by SD Catalog No. Cl3.10:421.)
 - (b) "Water Measurement Manual," U. S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U. S. Government Printing Office, Washington D. C. 20402. Order by Catalog No. 127,19/2:W29/2, Stock No. S/N 24003-0027.)

Monitoring and Reporting Program No. 91-50

- (c) "Flow Measurement in Open Channels and Closed Conduits," U. S. Department of Commerce, National... Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Service (NTIS) Springfield, VA 22151. Order by NTIS No. PB-273-535/5ST.)
- (d) "NPDES Compliance Sampling Manual," U. S.
 Environmental Protection Agency, Office of Water
 Enforcement. Publication MCD-51, 1977, 140 pp.
 (Available from the General Services Administration
 (8FFS), Centralized Mailing Lists Services, Building
 41, Denver Federal Center, Denver, CO 80225.)
- Monitoring must be conducted according to United States
 Environmental Protection Agency test procedures approved
 under Title 40, Code of Federal Regulations (CFR), Part 136,
 "Guidelines Establishing Test Procedures for Analysis of
 Pollutants Under the Clean Water Act" as amended, unless
 other test procedures have been specified in this Order.
- 4. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Executive Officer.
- 5. \(\text{Monitoring results must be reported on discharge monitoring report forms approved by the Executive Officer. \)
- 6. If the discharger monitors any pollutants more frequently than required by this Order, using test procedures approved under 40 CFR, Part 136, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharger's monitoring report. The increased frequency of monitoring shall also be reported.
- 7. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

- Records of monitoring information shall include:
 - The date, exact place, and time of sampling or measurements;
 - The individual(s) who performed the sampling or measurements;
 - The date(s) analyses were performed; (d)
 - The individual(s) who performed the analyses;
 - The analytical techniques or method used; and
 - The results of such analyses.
- All monitoring instruments and devices which are used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.
- The discharger shall report all instances of noncompliance 10. not reported under Reporting Requirement D.7 of this Order at the time monitoring reports are submitted. The reports shall contain the information listed in Reporting Requirement E.7.
- The monitoring reports shall be signed by an authorized person as required by Reporting Requirement E.15.
- A composite sample is defined as a combination of at least eight sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24 hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.
- A grab sample is an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.
- Sampling and analysis shall, as a minimum, be conducted in accordance with Article 6 of California Code of Regulations, Title 22, Division 4, Chapter 3 (Reclamation Criteria).

Monitoring and Reporting Program No. 91-50

B. EFFLUENT MONITORING

The following shall constitute the effluent monitoring program for the City of San Clemente Water Reclamation Plant:

N-+ 0-m 1 N3T 1 D11	mple Sampling pe Frequency	Reporting Frequency
Flowrate Biochemical Oxygen Demand mg/L Com (5-Day @ 20 C) Total Suspended Solids mg/L Com Volatile Suspended Solids mg/L Com pH Total Dissolved Solids mg/L Com Chloride mg/L Com Sulfate mg/L Com Sulfate mg/L Com Manganese mg/L Com Manganese mg/L Com Substances mg/L Com Substances mg/L Com	mposite weekly mposite weekly mposite weekly mposite weekly mposite monthly mo	Monthly

^{*} Samples for coliform bacteria shall be collected at least daily and at a time when wastewater characteristics are most demanding on the treatment facilities and disinfection procedures.

** Turbidity analysis shall be performed by a continuous recording turbidimeter.

Note:

MGD = million gallons per day
mg/l = milligrams per liter
MPN/l00 ml = Most Probable Number per 100 milliliters
NTU = Nephelometric Turbidity Units

C. RECLAIMED WATER USERS SUMMARY REPORT

A reclaimed water users summary report shall be submitted quarterly containing the following information:

a) Reclaimed water use site summary information

The following information shall be submitted for each reclaimed water use site.

- Name of the reclaimed water use site
- 2) Owner of the reclaimed water use facility
- 3) Address of the reclaimed water use site
- 4) Name of the reclaimed water use supervisor
- 5) Phone number of the reclaimed water use supervisor
- 6) Mailing address of the reclaimed water use supervisor, if different from site address
- 7) Basin Plan name and number of hydrologic subarea underlying the reclaimed water use site
- 8) Volume of reclaimed water delivered to the reclaimed water use site on a monthly basis.

b) Reclaimed water use summary information

- Total volume of reclaimed water supplied to all reclaimed water users for each month of the reporting period.
- Total number of reclaimed water use sites.
- c) Reclaimed water use site inspections

Number of reclaimed water use site inspections conducted by discharger/producer staff and identification of sites inspected for the reporting period.

d) Reclaimed water user violations of the discharger/producer's rules and regulations

The discharger/producer shall identify all reclaimed water users known by the discharger/producer to be in violation of the discharger/producer's rules and regulations for reclaimed water users. The report shall include a description of the noncompliance and its cause, including the period of noncompliance, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

D. BRINE INTERCEPTION AND DISPOSAL FACILITIES

Brine collected in the subsurface drain system at the Pacific Golf Club shall be monitored for the following items at the frequency shown and reported at quarterly intervals:

Determination	Unit	Frequency
Flowrate	gpd	Continuous
Total Dissolved Solids	mg/L	Monthly
Nitrate (as NO3)*	mg/L	Monthly

Grab sample.

E. RAINFALL RUNOFF

During the months of October through March of each year, rainfall runoff shall be sampled in the drainage channels exiting the Pacific Golf Club on its eastern boundary. These sampling points shall include the brine collection system and the low flow detention system. Rainfall runoff shall be monitored at the frequency shown and reported at monthly intervals:

Determination	Unit	Premiency
Total Dissolved Solids	mg/L	Weekly
Nitrate (as NO3)	mg/L	Weekly

Grab sample.

F. SEWAGE SOLIDS

A log of the type, quantity, manner of disposal and disposal location of solids removed in the course of sewage treatment shall be maintained and submitted monthly.

F. FILTER BACKWASH

The following shall constitute the filter backwash monitoring program:

Only when rainfall runoff from the Pacific Golf Club occurs during the months of October - March.

Determination	Unit	Sample Type	Sampling Frequency	Reporting Frequency
Flowrate Biochemical Oxygen Demand Total Suspended Solids Volatile Suspended Solids Total Dissolved Solids Percent Sodium Fluoride Boron Nitrate (as N) Phosphate (as P) Iron Manganese Settleable Solids	mg/L mg/L mg/L mg/L mg/L mg/L mg/L	• .	Quarterly	Quarterly Quarterly Quarterly Quarterly Quarterly Quarterly Quarterly Quarterly Quarterly Quarterly Quarterly Quarterly Quarterly Quarterly Quarterly

G. GROUND WATERS



The following shall constitute the Municipal golf course ground water monitoring program for the City of San Clemente. Representative samples of ground water from City of San Clemente wells 3 4 and 6 shall be collected and monitored as specified below:

·				
Determination	Unit	Sample Type	Sampling Frequency	Reporting Frequency
Total Dissolved Solids Percent Sodium Fluoride Boron	₹ (T	Composite	Semiannually Semiannually	Semiannually Semiannually Semiannually Semiannually

H. REPORTING

Monitoring reports shall be submitted to the Executive Officer in accordance with the following schedule:

Reporting Frequency	Report Period	Report Due
***************************************	January, February, March, April, May, June, July, August, September, October, November, December	By the end of the following month

Reporting Frequency	Report Period	Report Due
Quarterly	January-March April-June July-September October-December	April 30 July 31 October 31 January 31
Semiannually	January-June July-December	July 31 January 31
Annually	January-December	January 31

Monitoring reports shall be submitted to:

California Regional Water Quality Control Board San Diego Region 9771 Clairemont Mesa Blvd., Suite B San Diego, CA 92124-1331

and the

Environmental and Natural Resources Management Office Marine Corps Base Camp Pendleton, CA 92055-5010

Ordered by

Arthur L. Coe Executive Officer May 20, 1991